



1600

RAW SEQUENCE LISTING

DATE: 06/23/2003

PATENT APPLICATION: US/09/746,311B

TIME: 13:56:47

Input Set : A:\EP.txt

Output Set: N:\CRF4\06232003\I746311B.raw

3 <110> APPLICANT: Suciu-Foca, Nicole
 4 Liu, Zhuoro
 5 Chang, Chih-Chao
 6 Cortesini, Raffaello
 8 <120> TITLE OF INVENTION: Generation of Antigen-Specific T Suppressor Cells For
 Treatment of

9 Rejection

11 <130> FILE REFERENCE: 0575/58332-B

13 <140> CURRENT APPLICATION NUMBER: 09/746,311B

14 <141> CURRENT FILING DATE: 2000-12-21

16 <150> PRIOR APPLICATION NUMBER: PCT/US00/16594

17 <151> PRIOR FILING DATE: 2000-06-15

19 <160> NUMBER OF SEQ ID NOS: 382

21 <170> SOFTWARE: PatentIn version 3.1

23 <210> SEQ ID NO: 1

24 <211> LENGTH: 266

25 <212> TYPE: PRT

26 <213> ORGANISM: Human HLA-DRB

28 <400> SEQUENCE: 1

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31 1 5 10 15

34 Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr

35 20 25 30

38 Arg Pro Arg Phe Leu Trp Gln Leu Lys Phe Glu Cys His Phe Phe Asn

39 35 40 45

42 Gly Thr Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr Asn Gln Glu

43 50 55 60

46 Glu Ser Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr

47 65 70 75 80

50 Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu

51 85 90 95

54 Leu Glu Gln Arg Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr

55 100 105 110

58 Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg Val Glu Pro Lys Val

59 115 120 125

62 Thr Val Tyr Pro Ser Lys Thr Gln Pro Leu Gln His His Asn Leu Leu

63 130 135 140

66 Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp

67 145 150 155 160

70 Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu

71 165 170 175

74 Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr

75 180 185 190

78 Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser

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79          195          200          205
82 Val Thr Ser Pro Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala
83      210          215          220
86 Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu
87 225          230          235          240
90 Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His
91          245          250          255
94 Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser
95          260          265
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99 <211> LENGTH: 237
100 <212> TYPE: PRT
101 <213> ORGANISM: Human HLA-DRB
103 <400> SEQUENCE: 2
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106 1          5          10          15
109 Phe Phe Asn Gly Thr Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr
110          20          25          30
113 Asn Gln Glu Glu Ser Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg
114          35          40          45
117 Ala Val Thr Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln
118 50          55          60
121 Lys Asp Leu Leu Glu Gln Arg Arg Ala Ala Val Asp Thr Tyr Cys Arg
122 65          70          75          80
125 His Asn Tyr Gly Ala Val Glu Ser Phe Thr Val Gln Arg Arg Val Glu
126          85          90          95
129 Pro Lys Val Thr Val Tyr Pro Ser Lys Thr Gln Pro Leu Gln His His
130          100          105          110
133 Asn Leu Leu Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu
134          115          120          125
137 Val Arg Trp Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser
138 130          135          140
141 Thr Gly Leu Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met
142 145          150          155          160
145 Leu Glu Thr Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu
146          165          170          175
149 His Pro Ser Val Thr Ser Pro Leu Thr Val Glu Trp Arg Ala Arg Ser
150          180          185          190
153 Glu Ser Ala Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu
154          195          200          205
157 Gly Leu Leu Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln
158 210          215          220
161 Lys Gly His Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser
162 225          230          235
165 <210> SEQ ID NO: 3
166 <211> LENGTH: 81
167 <212> TYPE: PRT
168 <213> ORGANISM: Human HLA-DRB
170 <400> SEQUENCE: 3

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172 Arg Phe Leu Trp Gln Leu Lys Phe Glu Cys His Phe Phe Asn Gly Thr
173 1          5          10          15
176 Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr Asn Gln Glu Glu Ser
177          20          25          30
180 Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr Glu Leu
181          35          40          45
184 Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu Leu Glu
185          50          55          60
188 Gln Arg Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr Gly Ala
189 65          70          75          80
192 Val
196 <210> SEQ ID NO: 4
197 <211> LENGTH: 266
198 <212> TYPE: PRT
199 <213> ORGANISM: Human HLA-DRB
201 <400> SEQUENCE: 4
203 Met Val Cys Leu Lys Leu Pro Gly Gly Ser Cys Met Thr Ala Leu Thr
204 1          5          10          15
207 Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr
208          20          25          30
211 Arg Pro Arg Phe Leu Trp Gln Leu Lys Phe Glu Cys His Phe Phe Asn
212          35          40          45
215 Gly Thr Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr Asn Gln Glu
216          50          55          60
219 Glu Ser Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr
220 65          70          75          80
223 Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Ile
224          85          90          95
227 Leu Glu Asp Glu Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr
228          100         105         110
231 Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg Val Glu Pro Lys Val
232          115         120         125
235 Thr Val Tyr Pro Ser Lys Thr Gln Pro Leu Gln His His Asn Leu Leu
236          130         135         140
239 Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp
240 145          150         155         160
243 Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu
244          165         170         175
247 Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr
248          180         185         190
251 Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser
252          195         200         205
255 Val Thr Ser Pro Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala
256          210         215         220
259 Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu
260 225          230         235         240
263 Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His
264          245         250         255
267 Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser

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271 <210> SEQ ID NO: 5
272 <211> LENGTH: 225
273 <212> TYPE: PRT
274 <213> ORGANISM: Human HLA-DRB
276 <400> SEQUENCE: 5
278 Gly Asp Thr Arg Pro Arg Phe Leu Trp Gln Leu Lys Phe Glu Cys His
279 1          5          10          15
282 Phe Phe Asn Gly Thr Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr
283          20          25          30
286 Asn Gln Glu Glu Ser Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg
287          35          40          45
290 Ala Val Thr Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln
291          50          55          60
294 Lys Asp Leu Leu Glu Gln Arg Arg Ala Ala Val Asp Asn Tyr Cys Arg
295 65          70          75          80
298 His Asn Tyr Gly Val Val Glu Ser Phe Thr Val Gln Arg Arg Val Glu
299          85          90          95
302 Pro Lys Val Thr Val Tyr Pro Ser Lys Thr Gln Pro Leu Gln His His
303          100         105         110
306 Asn Leu Leu Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu
307          115         120         125
310 Val Arg Trp Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser
311          130         135         140
314 Thr Gly Leu Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met
315 145         150         155         160
318 Leu Glu Thr Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu
319          165         170         175
322 His Pro Ser Val Thr Ser Pro Leu Thr Val Glu Trp Arg Ala Arg Ser
323          180         185         190
326 Glu Ser Ala Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu
327          195         200         205
330 Gly Leu Leu Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln
331          210         215         220
334 Lys
335 225
338 <210> SEQ ID NO: 6
339 <211> LENGTH: 89
340 <212> TYPE: PRT
341 <213> ORGANISM: Human HLA-DRB
343 <400> SEQUENCE: 6
345 Arg Phe Leu Trp Gln Leu Lys Phe Glu Cys His Phe Phe Asn Gly Thr
346 1          5          10          15
349 Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr Asn Gln Glu Glu Ser
350          20          25          30
353 Val Arg Phe Asp Ser Asp Val Arg Glu Tyr Arg Ala Val Thr Glu Leu
354          35          40          45
357 Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu Leu Glu
358          50          55          60

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361 Gln Arg Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr Gly Val
362 65                               70                               75                               80
365 Gly Glu Ser Phe Thr Val Gln Arg Arg
366                               85
369 <210> SEQ ID NO: 7
370 <211> LENGTH: 89
371 <212> TYPE: PRT
372 <213> ORGANISM: Human HLA-DRB
374 <400> SEQUENCE: 7
376 Arg Phe Leu Trp Gln Leu Lys Phe Glu Cys His Phe Phe Asn Gly Thr
377 1                               5                               10                               15
380 Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr Asn Gln Glu Glu Ser
381                               20                               25                               30
384 Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr Glu Leu
385                               35                               40                               45
388 Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu Leu Glu
389                               50                               55                               60
392 Gln Ala Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr Gly Val
393 65                               70                               75                               80
396 Val Glu Ser Phe Thr Val Gln Arg Arg
397                               85
400 <210> SEQ ID NO: 8
401 <211> LENGTH: 89
402 <212> TYPE: PRT
403 <213> ORGANISM: Human HLA-DRB
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407 Arg Phe Leu Trp Glu Leu Lys Phe Glu Cys His Phe Phe Asn Gly Thr
408 1                               5                               10                               15
411 Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr Asn Gln Glu Glu Ser
412                               20                               25                               30
415 Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr Glu Leu
416                               35                               40                               45
419 Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu Leu Glu
420                               50                               55                               60
423 Gln Arg Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr Gly Val
424 65                               70                               75                               80
427 Gly Glu Ser Phe Thr Val Gln Arg Arg
428                               85
431 <210> SEQ ID NO: 9
432 <211> LENGTH: 89
433 <212> TYPE: PRT
434 <213> ORGANISM: Human HLA-DRB
436 <400> SEQUENCE: 9
438 Arg Phe Leu Trp Gln Leu Lys Phe Glu Cys His Phe Phe Asn Gly Thr
439 1                               5                               10                               15
442 Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr Asn Gln Glu Glu Tyr
443                               20                               25                               30
446 Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr Glu Leu
447                               35                               40                               45

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/746,311B

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:333; Xaa Pos. 38
Seq#:342; Xaa Pos. 167
Seq#:344; Xaa Pos. 81